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MID 980 568 620

CURRENT CONDITIONS SUMMARY

DELPHI CORPORATION
DELPHI AUTOMOTIVE HOLDINGS GROUP
FLINT EAST PLANT 500
FLINT, MICHIGAN

D/000016

CURRENT CONDITIONS SUMMARY

DELPHI CORPORATION
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FLINT, MICHIGAN

US EPA ID # MID980568620

by

Haley & Aldrich, Inc.
Cleveland, Ohio

for

Delphi Corporation
Troy, Michigan

File No. 33520-013
15 December 2006

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1. INTRODUCTION

Haley & Aldrich, Inc. (Haley & Aldrich) prepared this Current Conditions Summary (CCS) under the direction of Delphi Corporation, for the Delphi Flint-East Plant 500 facility. The United States Environmental Protection Agency (U.S. EPA) ID Number for this Site is MID980568620. The Site is located at 1601 North Averill Avenue, Flint, Michigan (Figures 1 and 2). This CCS was prepared to aid Delphi in characterizing potential releases of hazardous waste, hazardous constituents, hazardous substances and/or petroleum products at the Site.

The current environmental conditions at Delphi Corporation's Flint East Plant 500 Operations ("Site") (Figure 1) were assessed by reviewing Site and regulatory agency files; interviewing site personnel; reviewing historic aerial photographs; and observing and documenting current conditions through several site visits. Through this process we identified 26 areas were identified where hazardous waste, hazardous constituents, hazardous substances and/or petroleum products were potentially treated, stored or disposed (released). These areas are identified as Areas of Interest (AOIs).

AOIs where a release of hazardous waste, hazardous constituents, hazardous substances and/or petroleum products was known or is probable are recommended for further investigation. This information is summarized in the enclosed matrix of AOIs and corresponding figures (Table 1 and Figure 2).

2. SITE BACKGROUND

Delphi Corporation's Flint East Plant 500 is located at 1601 North Averill Avenue, Flint, Genesee County, Michigan (Figure 1). The Site is approximately 58 acres with 373,000 square feet of floor space. The buildings present at the Site include the main engineering and testing building, a drum storage building, a boiler room, and several mobile sheds. The main engineering and testing building includes administrative office space, laboratories, and engine test cells. This consists of slab on-grade construction, with small sub-grade pits, sumps, and trenches.

A former powerhouse is present to the southwest of Plant 500. The powerhouse is on a separate parcel of land than Plan 500 but is owned by Delphi. For convenience, the powerhouse was included in the evaluation of Plant 500.

The five-story powerhouse, built in 1952, contained five coal fired boilers and one gas fired boiler. Coal was shipped to the site via rail and dumped into large silos. Boiler water and water from the recirculating water system were chemically treated within the building. The powerhouse contains tanks, pits, trenches, air compressors. The powerhouse also contained office space, locker rooms, and a laboratory. The powerhouse was eventually closed in 1998.

The Site was first developed in 1957 and is used for automotive engineering research. From 1957 to 1999, the Site was owned by various divisions of General Motors (GM). GM conducted engine testing and product development. The Site is currently used for the same purpose. In January 1999, Delphi Automotive Systems separated from GM to form a new company. Later, the company was renamed Delphi Corporation. The Site currently operates as the Delphi Automotive Holdings Group, Division of Delphi Corporation.

Past and current production activities at the Site are:

- Engine testing
- Research
- Product development
- Quality Control

Based on a review of the site processes and activities, the general classes of chemicals that may have or are currently used at the Site include;

- Petroleum products including various oils (quench, soluble, non-soluble, grinding, cutting, hydraulic, lubricating, gasoline, diesel)
- Paint products
- Metals including chromium, copper, nickel, zinc and cyanide
- Semi-Volatile Organic Compounds
- Volatile Organic Compounds including chlorinated and non-chlorinated solvents.
- Polychorinated Biphenyls (PCBs)
- Various Specialized compounds

A summary of the general materials used at each AOI is included in Table 1.

Potable and combined sewer services are supplied by City of Flint municipal water supply. Industrial waste water is treated at the onsite Flint East Wastewater Treatment Plant (WWTP) and then discharged to the city sanitary sewer system.

The Site stormwater is collected in stormwater sewers and then is discharged to City of Flint main stormwater sewer which empties into Gilkey Creek located south of the Site.

The Site is located approximately 1 mile northeast of the Gilkey Creek which flows to the Flint River approximately 2.0 miles west of the Site.

The Site's EPA Generator ID Number is MID980568620. The Site operates as a RCRA "Large Quantity Generator". Presently the only hazardous waste streams generated at the Site are paint wastes.

The Site geology consists primarily of interbedded clay/silty clay and fine sand/silt. Sand seams and layers also appear within the clay and silt layers across the Site. Clay is present at depths from less than one foot to between 10 and 20 feet below grade. Silt generally underlies the surficial clay and is in turn underlain by hard, dry, gray clay which was observed to a depth of at least 49 feet below grade. Although the bottom of unconsolidated materials has not been determined, unconsolidated layers are known to be between 50 and 100 feet thick in the region of the Site.

Bedrock underlying these sediments consists of the Pennsylvanian Period Saginaw Group, comprised of the Lower Saginaw, Verne Limestone, and the Upper Saginaw Formations. These formations consist of cyclic interbedded sand, shale, and limestone deposits indicative of deposition during shallow sea transgressive and recessive episodes, which occurred over this portion of Michigan. Bedrock was not encountered in any of the site soil test borings or monitoring well explorations.

The upper unconsolidated glacial deposits beneath the Site represent the primary interest with respect to assessment of groundwater conditions. Based on Gilkey Creek and previous investigations at or near the Site, the water table is anticipated to be between 4 to 10 feet below ground surface. The direction of groundwater flow has not been confirmed.

Based on the regional and property topography, surface runoff in the vicinity of the Site drains generally to the south toward Gilkey Creek. Gilkey Creek is a perennial stream that flows toward the west where it joins the Flint River, approximately 1.5 miles west of the Site. The relationship of site groundwater and surface water has not been confirmed.

3. AREAS OF INTEREST

Areas of Interest are areas associated with the Site where evidence of past treatment, storage or disposal (or release) of hazardous waste, hazardous constituents, hazardous substances and/or petroleum products is known or probable to have occurred. The AOIs identified during the preparation of this CCS are summarized in Table 1.

4. INFORMATION REVIEWED

To identify AOIs, Haley & Aldrich, Inc. reviewed Delphi's records of spills and releases, environmental sampling data, process descriptions and diagrams, and Site figures.

The following reports were also reviewed to identify potential AOIs:

Hazardous Waste Storage Area Closure Plan, AC Rochester Division, Plant 500 dated 12 December 1988, prepared by Techna Corporation.

Remedial Action Plan – Pumping Option Engineering Building Tank Farm, AC Rochester Division, Plant 500, dated 22 June 1987, prepared by NTH.

Former Interim Status Hazardous Waste Storage Area Closure Report and Certification, AC Rochester Division, Plant 500 dated August 2000, prepared by Haley & Aldrich, Inc.

Quarterly Sampling Report, Plant 500, dated January 2005, prepared by Haley & Aldrich, Inc.

Quarterly Sampling Report, Plant 500, dated April 2005, prepared by Haley & Aldrich, Inc.

Letter from MDEQ to Alton Putney, Closure Report and Certification, Delphi Energy & Chassis Systems, Plant 500 dated 18 December 2000.

Letter from Ac Rochester Division to Department of Natural Resources, Request for Administrative Approval of Waste Oil Tank #5024 from Interim Status, Plant 500 dated 16 October 1989.

Letter from MDEQ to AC Rochester Division, Partial Closure Plan Approval, Plant 500 dated 23 January 1990.

Letter from MDEQ to AC Rochester Division, Certificatin of Partial Closure UST #5009, Plant 500 dated 31 March 1993.

Report on Semi-Annual Groundwater Monitoring at Engineering Complex Former Tank Farm Area, Plant 500 dated 10 October 1997 prepared by Delphi Energy & Engine Management Systems.

A site visit and interview with Terry Dwyer, Environmental, Health and Safety Engineer was conducted on 11 August 2006. During the Site visit, Delphi personnel knowledgeable of current or past operations accompanied the Haley & Aldrich representative. Material Safety Data Sheets (MSDSs) for chemicals currently used in manufacturing and maintenance

activities at the Site were obtained from Delphi Site personnel and reviewed for RCRA-regulated constituents and other hazardous substances.

Files maintained by the Michigan Department of Environmental Quality (MDEQ) Lansing District Office were accessed through a request submitted under the Freedom of Information Act. Additionally, an environmental database search was performed with an ASTM expanded radius of the Site. Sanborn fire insurance maps were requested but coverage was not available. Aerial photographs for 1941, 1950, 1964, 1972, 1982, 1992 and 1997 were also reviewed to identify potential environmental issues.

5. SELECTION CRITERIA FOR AOIs REQUIRING ADDITIONAL INVESTIGATION

As stated above, AOIs are areas associated with the Site where evidence of past treatment, storage or disposal of hazardous waste, hazardous constituents or petroleum products is known or probable to have occurred. The identification of AOIs retained for further investigation was based on the following:

1. Areas with a confirmed release to the environment.

2. Areas with a probable release based on visual evidence or interview with knowledgeable personnel.

3. Areas where a release to the environment is possible because a release pathway could not be ruled out. For example, where highly corrosive materials were used and impact of water discharging into sumps or trenches may have resulted in degradation of the integrity of that system and no evidence to the contrary was available, such systems were considered Areas of Interest warranting further investigation.

4. Areas with the likely presence of free product, regardless of its composition.

Any AOIs that were initially identified using the criteria set forth above were upon further inquiry eliminated from further investigation based on the following:

1. Areas where no release pathway to the environment was identified or no evidence of release was observed, documented, reported, or suspected.

2. Areas where, based on the volumes of materials managed, the potential for release was considered de minimis.

Based on the results of this study further investigation is recommended as detailed in Table 1. The details of the inspection and sampling program will be presented in a Field Investigation Work Plan.

6. CONCLUSIONS

AOIs have been identified by reviewing Delphi records, observing site conditions, and interviewing Delphi personnel with knowledge of current and historic site operations. Further investigation is recommended.

7. APPLICABLE ENVIRONMENTAL REGULATIONS

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)

The Site is subject to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980, and Part 201 of Michigan's Natural Resources and Environmental Protection Act (NREPA). These laws facilitate the remediation of abandoned waste sites. CERCLA places liability on responsible parties who 1) own a site where hazardous substances were disposed or abandoned, 2) previous owners at the time the hazardous substances were disposed or abandoned, 3) parties who contributed hazardous substances for disposal at the site, and 4) transporters of hazardous substances that select the site for disposal. The courts have interpreted CERCLA to impose liability for all responsible parties regardless of fault.

Under CERCLA, the USEPA has the power require responsible parties take a response action or to pay for such actions if the regulator takes action. The costs of this response action may include cleanup costs, enforcement costs, government oversight costs, and natural resources damages.

This Site is not currently undertaking a CERCLA or a Part 201 action.

Resource Conservation and Recovery Act of 1976 (RCRA)

The Resource Conservation and Recovery Act (RCRA) provides comprehensive federal regulation of hazardous wastes from point of generation to final disposal ("cradle to grave"). All generators of hazardous waste must comply with all the applicable requirements of the statute. Any facility that applied for or has interim status or is a permitted transporter, storage or disposal facility (TSDF) is subject to corrective action under RCRA at the entire facility.

Part 111 of NREPA, as amended, addresses the requirements for generators of hazardous wastes and certain Corrective Action sites in the State of Michigan.

In accordance with The Former Hazardous Waste Storage Unit Closure Plan dated August 2000, Delphi is currently subject to RCRA Unit closure requirements. The Closure Plan specifies that groundwater monitoring must be conducted until such time that a remediation option is implemented.

In addition, the Site is listed on the EPA's RCRA Corrective Action database as "Low" priority, and is not on the EPA's GPRA list.

It is not known if the Powerhouse is subject to Corrective Action as part of Plant 500 or as an individual property.

Clean Water Act

The Clean Water Act provides federal regulation of all sources of water pollution. The primary means of obtaining national water quality is through the National Pollutant Discharge Elimination System (NPDES) permits on all facilities that discharge pollutants into the waters of the United States. The Clean Water Act also establishes Ambient Water Quality Standards for the protection of human and ecological health.

Part 31 of NREPA as amended addresses the requirements for protection of surface water in the State of Michigan.

Although primarily administrative, this Delphi site may have requirements to eliminate NPDES discharges upon closure of the site.

Toxic Substances Control Act (TSCA)

The Toxic Substances Control Act (TSCA) regulates the manufacture, processing, and distribution in commerce of chemical substances and mixtures capable of adversely affecting health or the environment. Regulations promulgated under TSCA contain requirements for the labeling, disposal, storage, spill response, cleanup criteria, and incineration of Polychlorinated Biphenyls (PCBs), among other substances.

The presence of PCBs at concentrations that have the potential to trigger TSCA requirements have not been detected in environmental media.

Michigan Natural Resources and Environmental Protection Act (NREPA)

Michigan Public Act 451 of 1994, as amended, is the Natural Resources and Environmental Protection Act (NREPA) and compiles environmental laws of the State of Michigan. Four parts of NREPA were identified that may apply to closure of the facility: Hazardous Waste Management (Part 111), Environmental Response (Part 201), Leaking Underground Storage Tanks (Part 213), and Water Resources Protection (Part 31).

Michigan Part 111 of NREPA. (Hazardous Waste Management)

Michigan Part 111 of NREPA (Part 111) is the Michigan State equivalence to RCRA. Michigan is a delegated state responsible for administration of hazardous waste management activities with the state. Part 111 is consistent with RCRA and regulates generators, transporters and disposal activities within Michigan.

Part 111 regulates waste management, the management and closure of accumulation tanks and areas (<90 day accumulation), and interim status of treatment and disposal units and the management of satellite accumulation areas. Sites with regulated units can be subject to corrective action requirements for the entire facility under Part 111.

Under Part 111, RCRA-regulated units require certification of closure to assure that hazardous constituents have been removed. This requirement can require the removal of hazardous constituents to concentrations equal to or less than background concentrations ("Clean Closure") or to concentrations of hazardous constituents to levels protective of human-health and the environment. Closure of regulated units to levels protective of human-health and the environment can be achieved through the use of generic cleanup criteria.

Based on memorandum from Norman Niedergang, Director of Waste, Pesticides, and Toxics Division, (U.S. EPA Region V), to Jim Sygo, Chief of Waste Management Division, (Michigan DEQ), dated June 5, 1998 the U.S. EPA Region V acknowledged and recognized Michigan's intention to use the Part 201 Generic Cleanup Standards in the administration of the State' hazardous waste management program (Part 111), including the regulated unit closure and corrective action portions of the program at both licensed and interim status facilities. This understanding was limited to the use of Michigan Part 201 Generic Cleanup Criteria themselves and as they are utilized in the hazardous waste management program under Part 111. Michigan Part 201 (discussed below) does not affect Part 111.
A memorandum of understanding was signed between the U.S. EPA and Michigan DEQ in November 2000. Indicating that the U.S. EPA would generally not take lead action pursuant to RCRA Corrective Action at facilities being addressed by the MDEQ under Part 201 and 111 unless,

- "Region 5 determines that the site may pose an imminent and substantial endangerment to public health, welfare, or the environment;
- The facility owner or Operator fails to properly implement a course of action required by the MDEQ;
- The facility is subject to an existing federal (administrative or judicial) order for cleanup;
- The facility is listed on, or proposed for listing on, the USEPA's National Priorities List and sites where Region 5 has submitted a Hazard Ranking Scoring package to USEPA Headquarters, unless the site is eligible for a deferral under the RCRA/Comprehensive Environmental Response, Compensation, and Liability Act deferral policy dated July 1,1995, EPA Doc. No. 540-R-95-002g;
- The exercise of federal authority is necessary for Region 5 to meet its legal responsibilities."

In addition, closure (including potential assessment of regulated USTs) may be required under Part 111. If the UST is determined to be leaking, Part 213 (below) may also be applicable.

Based on site personnel interview and site document review, there are no known USTs remaining at the Site.

Part 201 of NREPA (Environmental Response)

The intent of Part 201 of NREPA (Part 201) is to protect the environment and natural resources, establish liability for environmental releases, regulate the response to the release of hazardous substances into the environment, waters, and provide for charges, fees, and

penalties, and provide remedies. Part 201 provides means by which to eliminate liability associated with the purchase of property with environmental contamination but establishes "Due Care" obligations associated with the property. Pertinent information from Part 201 that may be applicable to this Site include:

- Part 201 defines a "facility" as a location where a hazardous substance is present "in excess of the concentrations which satisfy the requirements of section 20120a(1)(a) or (17).
- Part 201 defines liable party based on causation for a release or purchase of property without performing a baseline environmental assessment.
- Part 201 establishes generic cleanup criteria (GCC) for applicable exposure pathways such as groundwater protection, surface water protection, inhalation, and direct contact. Generic criteria for these pathways were developed for multiple land use scenarios such as residential, commercial and industrial. These criteria (Michigan Part 201 Generic Cleanup Criteria (GCC)) are used in Section IV to determine if an area may be a "facility."
- Use of exposure barriers instead of remediation to generic criteria is allowed under Part 201.

Previous soil and groundwater chemical data were reviewed and compared to Part 201 GCC. Based on this review, the Site is classified as a facility and is thus subject to management of the site under Part 201 of Public Act 451 of 1994, as amended, of NREPA.

Part 213 of Public Act 451 of 1994 as amended (Leaking Underground Storage Tanks)

Part 213 of Public Act 451 of 1994, as amended, of NREPA (Part 213) addresses leaking underground storage tanks (LUSTs). Part 213 is intended to provide remedies for sites posing a threat to the public health, safety, or welfare and the environment caused by a release(s) of regulated substances from LUSTs.

Based on site personnel interview and site document review, there are no known LUSTs currently at the Site.

TABLES

TABLE 1
SUMMARY OF AREAS OF INTERST
FLINT-EAST, PLANT 500
FLINT, MICHIGAN

Areas of Interest	AOI Description	Summary of Materials Managed	Release Potential Evidence	Summary of Relevant Existing/Available Analytical Data (units = mg/kg or mg/l)	Further Investigation Recommended	Process/Equipment Status	Additional Information/Summary of Data Gaps
AOI-01	Former Fuel Underground Storage Tank Farm	- Gasoline - Diesel - "Benzene" - Rating Fuel - "waste gasoline" - leaded gasoline - gasonline dump tank - hydrocarbon separator	Facility tank maps indicate 21 USTs were in the area. Soil samples were collected upon removal of former USTs in 1992. Analytical data indicated BTEX were detected above criteria. Further investigations and monitoring through 1997 determined that benzene and ethylbenzene in groundwater were detected above criteria.	GW Sample Results: Benzene - 38 ug/l Ethylbenzene - 5.3 ug/l	Yes	Abandoned. Reported on facility drawings as removed from service and site in 1992.	- Groundwater samples last collected in October 1997 - Closure Report submitted to MDEQ in 2000. MDEQ later stated that they intend to disapprove the report formally at a later date due to report inadequacies. No further MDEQ correspondence has been received.
AOI-02	Gasoline Fueling Station	- Gasoline - Diesel	Trench (2' deep x 2' wide'x 30' long) on north side. No trenches along east or west side. Cracks evident in concrete at the fueling station. Evidence of spill absorbent found at fueling station.	None	Yes	Active	-
AOI-03	Former Hazardous Waste Storage Pad	- Paint wastes - Used paint rags - Waste solvents	Previous soil and groundwater data indicates evidence of release. Post -Closure monitoring required. From facility drawings, Tank #5080, a "containment sump; Barrel strg.blind sump" (sic) is included in this AOI.	Impact to groundwater above Generic 201 Criteria documented in April 2005 groundwater sampling event.	Yes	Active as raw material storage unit.	- Groundwater samples last collected in April 2005. - Post-Closure Care requirements under MDEQ unclear. - Groundwater flow direction appears to contradict Plant 400 and Plant 600 interpretations.
AOI-04	Fuel Trench	- Gasoline - Diesel - Alcohol mix	Fuel trench forms U-shape that connects Bldg 5179 and Bldg 5165. Trench approximately 4 feet deep and 4 feet wide. Third of trench exposed while remaining trench run is beneath ground surface. Fuel trench houses piping that transports waste gasoline from test cells in West and East Dyno Bldgs to New Tank Farm (AOI 08). Spills previously reported, however, trench is lined with 1-foot thick concrete. No evidence of cracks or standing liquids. Fuel trench routinely inspected and is equipped with vapor and leak detection systems.	None	No	Active	-
AOI-05	Used Oil AST (1000 gallon)	- Used oil	The tank (#5024) was reportedly installed in 1979. Site personnel interviewed indicated that there have no reported spills associated with this tank. Spill reports reviewed did not reveal any incidents associated with this tank. During the site visit, there were no signs of stressed vegetation or staining near the AST.	None	No	Active	-
AOI-06	Intermediate UST #23	- Used Gasoline from Fuel Trench	The tank is not intended to store gasoline but is used as and intermediary between the Fuel Trench (AOI 4) and the New Tank Farm (AOI 8). The UST was reportedly installed in 1979. There have been no reports of spills or incidents associated with this UST.	None	No	Active	-
AOI-07	Process Wastewater Pit	- Process wastewater (may include) - oils - paints - fuels - solvents	Approximately 15 ft deep concrete pit used to collect process wastewater prior to sending to WWTP. Vegetation appeared to be growing from the sides of the pit, an indication that there may be cracks in the sidewalls.	None	Yes	Active	-

TABLE 1
SUMMARY OF AREAS OF INTERST
FLINT-EAST, PLANT 500
FLINT, MICHIGAN

Areas of Interest	AOI Description	Summary of Materials Managed	Release Potential Evidence	Summary of Relevant Existing/Available Analytical Data (units = mg/kg or mg/l)	Further Investigation Recommended	Process/Equipment Status	Additional Information/Summary of Data Gaps
AOI-08	New Tank Farm	- Variety of Gasolines (new and used) - Diesel fuel - Methyl tert-Butyl ether - Ethanol - Methanol - Racing Fuel	22 tanks with approx. 250,000 gallon capacity total. All drains within the large concrete containment go to the waste sump that is manually cleaned out. The sump is inspected as needed or monthly. No reports of cracks. Spills contained within sump.	None	No	Active	-Drains within secondary containment of tanks in New Tank Farm drain into this waste sump. The waste sump is cleaned out manually as required or monthly. Sump is inspected after routine cleaning. According to site personnel, sump has no signs of deterioration or cracks, and therefore no pathway to environment.
AOI-09	Former Paint Booth	- Misc. Paints and solvents	The Former Paint Booth was reportedly installed in 1960 and removed in 1990 for the installation of the Boiler Room. According to records review, SAA of waste paints and paint rags located in Paint Booth. No known release issues, although limited information known regarding condition of paint booth and surface beneath at the time of removal.	None	No	Inactive. In operation from 1960-1990.	-
AOI-10	Current Paint Booth	- Misc. Paints and solvents	Current Paint Booth installed when Former Paint Booth (AOI-09) removed in 1990. According to site personnel, the paint booth has been inspected by the Michigan Department of Environmental Quality (MDEQ) for air permitting purposes and did not identify any findings. No other issues or incidents have been reported.	None	No	Active	-
AOI-11	Oil Storage Room	- Misc. Oils	Used oil is pumped out of test engines and into 55-gallon drums that eventually get emptied into the Used Oil AST (AOI 5). Staining was observed near the used oil drums. A drain that discharges to the WWTP was also observed in the northeastern corner of the room.	None	Yes	Active	-
AOI-12	Vehicle Test Lab	- Hydraulic oil from former hydraulic lifts - Potential Solvents	The test lab was formerly equipped with six hydraulic vehicle lifts. According to site personnel, the hydraulic lifts were removed and subsurface soil was analyzed. However, no analytical data was available for review. In addition, site personnel indicated that a solvent parts washer was once used in the test lab.	Not available for review.	Yes	Area is active but lifts removed.	- Analytical testing results not available for review.
AOI-13	Vehicle Emissions Room	- Hydraulic oil from former Hydraulic lifts	The Vehicle Emissions Room was formerly equipped with ten hydraulic vehicle lifts. According to site personnel, the lifts were removed but subsurface testing was not conducted.	None	Yes	Area is active but lifts removed.	-

TABLE 1
SUMMARY OF AREAS OF INTERST
FLINT-EAST, PLANT 500
FLINT, MICHIGAN

Areas of Interest	AOI Description	Summary of Materials Managed	Release Potential Evidence	Summary of Relevant Existing/Available Analytical Data (units = mg/kg or ug/l)	Further Investigation Recommended	Process/Equipment Status	Additional Information/Summary of Data Gaps
AOI-14	Pit with Transfer Tanks	- Alcohols	The transfer tanks are used to transfer various alcohols (methanol, ethanol, etc.) to the West Dyno Building. There are seven, 27 gallon transfer tanks in the pit. The pit appears to be approximately three feet deep. During the site visit, standing liquid and debris was observed within the pit around the tanks. The integrity of the pit could not be observed during the site visit.	None	Yes	Active	-
AOI-15	Trash & Cardboard Compactors	- General Waste and Cardboard	During the site visit, there was no evidence of staining associated with the hydraulics from the compactor. According to site personnel, no hazardous materials are used or disposed of in this area.	None	No	Active	-
AOI-16	SAA-Waste Paint in Paint Room	- Waste Paint	The SAA is used to temporarily store waste paint generated during the painting process. No spills or incidents associated with this SAA were reported.	None	No	Active	-
AOI-17	Second Floor Substation	Some transformers are PCB containing	Several transformers associated with this substation contain polychlorinated biphenyls (PCBs). According to site personnel, one spill has occurred in this area. It is unknown whether the spill was associated with a PCB containing transformer. The spill was contained within the containment barrier and surface was cleaned. No impact to subsurface as a result of spill due to location of substation being on second floor of building.	None	No	Active	-
AOI-18	Powerhouse	- Oils - water treatment chemicals - mercury switches - coal - ash - diesel fuel - salt brine - flyash	Residual liquids were present in pits and sumps. Oil staining was observed surrounding steam turbines and hyrdraulic equipment. Mercury switches were observed during site visit. Six ASTs are associated with this AOI (#5023, #5025, #5026, #5029, #5031 and #5032).	None	Yes	Inactive	- Should be noted that AOI condition represents additional safety concern during investigation. Vandalism, building condition and uncertainty in how shutdown occurred add to conditions.
AOI-19	Sitewide Groundwater	- Chlorinated compounds (AOI-03)	Although AOI-03 is identified as impacting groundwater, sitewide groundwater is considered an AOI to allow more wholistic approach to investigation.	See AOI-03.	Yes	N/A	- Groundwater samples last collected in April 2005. - Groundwater flow direction appears to contradict Plant 400 and Plant 600 interpretations. - Plant 600 may affect groundwater quality in southeast corner.
AOI-20	Oil/Water Separators	- Oils	Facility drawings identify three oil/water separators. Inspection of these oil/water separators did not reveal any cracks or deterioration.	None	No	Active	-
AOI-21	Former Gasoline USTs (#5016 and #5030)	- Gasoline	Facility drawings identify two former USTs of unknown size that were removed from service in the 1960's. It is unknown if these tanks were removed, filled in place or other.	None	Yes	Removed from Service	- Unknown if removed or how closed.

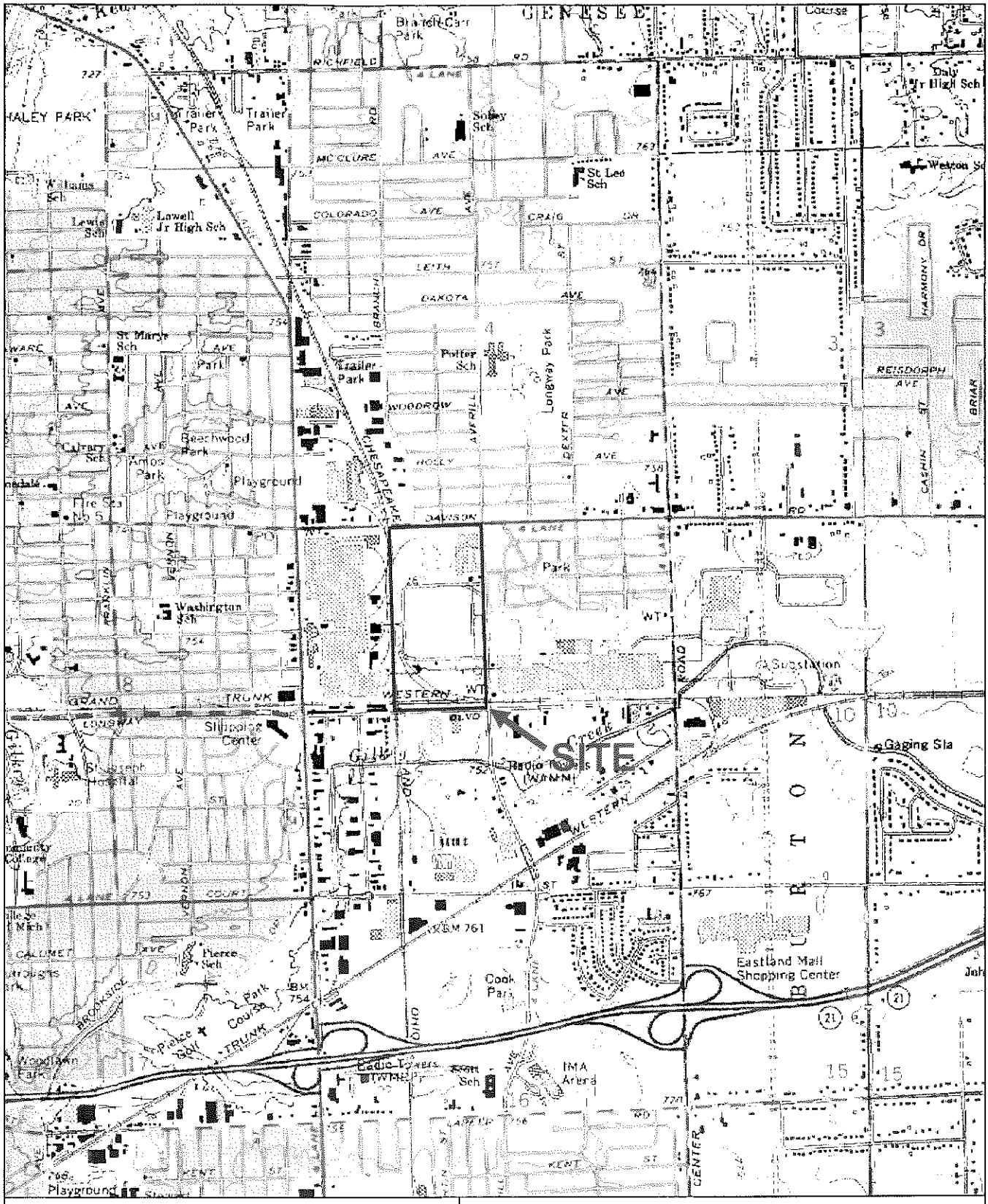
TABLE 1
SUMMARY OF AREAS OF INTERST
FLINT-EAST, PLANT 500
FLINT, MICHIGAN

Areas of Interest	AOI Description	Summary of Materials Managed	Release Potential Evidence	Summary of Relevant Existing/Available Analytical Data (units = mg/kg or mg/l)	Further Investigation Recommended	Process/Equipment Status	Additional Information/Summary of Data Gaps
AOI-22	Former "Waste" Oil UST (#5070)	- "Waste Oil"	Facility drawings identify a 1,000-gallon UST that was removed from service in 1983 and filled in place with sand.	None	Yes	Removed from Service, Filled with Sand	- Unclear if "Waste Oil" represents used oil.
AOI-23	Water Treatment Chemical AST (#5017)	- Mitco CW-1016L (Water Treatment)	Facility drawings identify a 500-gallon AST. Conditions of the tank could not be assessed due to building restrictions.	None	Yes	Active	-
AOI-24	New Tank Farm Gasoline Spill	- Gasoline	According to site personnel, one spill (approx. 100-300 gallons) of gasoline occured outside of the containment area of the new tank farm. Gasoline spilled onto the grassy/gravel area outside the tank farm extents.	None	Yes	N/A	-
AOI-25	Cooling Tower Sump Pit	-Cooling process water	Large pit circulated cooling process water from dyno test cells as well as the HVAC system. No signs of deterioration or cracks were evident during inspection.	None	No	Active	-
AOI-26	Hazardous and Flammable Materials Storage Building Sump	- Secondary containment liquids	Sump has been used to collect secondary containment liquids since the original use of the building (Former Hazardous Waste Storage Pad, AOI-03). This sump will be investigated as part of the AOI-03 investigation.	See AOI-03.	Yes (see AOI-03)	Active	-

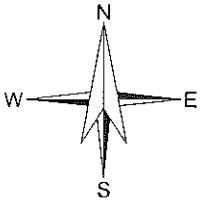
Notes

1. As with other Flint-East Site, a PA/VSI for Plant 500 does not appear to have been conducted. Plant 400 PA/VSI was conducted after Corrective Actions began.
2. The site-walk was conducted on 27 July 2006.
3. The sump inventory was conducted on 16 August 2006.

FIGURES



SITE COORDINATES: 43°01'47"N 83°38'52"W



U.S.G.S. QUADRANGLE: FLINT, MICHIGAN

HALEY & ALDRICH

DELPHI FLINT EAST PLANT 500 FACILITY
1601 NORTH AVERILL AVENUE
FLINT, MICHIGAN

PROJECT LOCUS

SCALE: 1:24000
AUGUST 2006

FIGURE 1

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